CHAPTER V

Consultation and Coordination

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Consultation and Coordination

During the preparation of the Glen Canyon Dam Environmental Impact Statement (EIS), input was actively solicited from a broad range of public constituencies as part of the ongoing public involvement process. These public constituencies for the Colorado River, Glen Canyon National Recreation Area, and Grand Canvon National Park include: academia, concessionaires, congressional delegations, environmental groups, fish and wildlife groups, general unaffiliated publics, seven Basin State governments, Indian Tribes, news media, power customers (represented by the Colorado River Energy Distributor's Association and individual power organizations), white-water rafters and guides, recreation groups, water users, and Colorado River Storage Project water and power entities.

This chapter summarizes public involvement during the Glen Canyon Dam EIS process and will serve as the Public Involvement Summary Report, in accordance with *Reclamation Instructions*.

BACKGROUND

Glen Canyon Dam was completed in 1963 prior to the passage of the National Environmental Policy Act (NEPA) of 1969. Consequently, there was no requirement for an EIS on the project prior to construction.

In December 1982, the Bureau of Reclamation (Reclamation) published an environmental assessment (EA) and finding of no significant impact (FONSI) on the impacts of a proposed powerplant uprate and rewind project. Reclamation proceeded with the uprate and rewind project but agreed not to use the increased powerplant capacity for flows above 31,500 cubic feet per second until completion of a more comprehensive study.

Glen Canyon Environmental Studies

Beginning in December 1982, Reclamation initiated the multiagency, interdisciplinary Glen Canyon Environmental Studies (GCES) at the direction of the Secretary of the Interior (Secretary) to address the concerns of the public and other Federal and State agencies about possible negative effects of the operations of Glen Canyon Dam on the existing downstream environmental and recreational resources.

Numerous information activities were conducted during the GCES (1987-89):

- · Department of the Interior briefings
- Environmental group briefings
- Congressional briefings
- · Constituent review meetings
- · News releases and media contacts
- Speeches
- · Video briefings

GCES Phase I

Between 1982 and 1987, 39 technical reports were prepared evaluating terrestrial biology, aquatic biology, sediment and hydrology, recreation, and dam operations. These technical reports were consolidated into a final technical report, program summaries, and review reports. No studies were conducted regarding the economic impact of changes in dam operations. A team composed of interagency technical staff and key researchers completed the *GCES Final Report* in January 1988, (U.S. Department of the Interior, 1988) consolidating the results of the individual studies into a summary document.

An Executive Review Committee made up of policy level representatives from Reclamation, National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), Department of the

Interior's Office of Environmental Project Review (now the Office of Environmental Policy and Compliance), and Western Area Power Administration (Western) prepared a report containing recommendations and options for decision. Using technical data presented in the GCES Final Report, a review by the National Research Council, and individual management priorities, the review committee determined that additional studies were required before any changes in the operations at Glen Canyon Dam could be recommended. That decision was not unanimous.

GCES Phase II

After review of the GCES Final Report and committee recommendations, the Secretary directed Reclamation to initiate additional studies to gather more data on specific operational elements. This second effort, GCES Phase II, began in 1988. These studies assess the impacts of low and fluctuating flows and potential impacts to resources and power revenues. Various constituent groups were involved in review of the study plans.

An additional principal purpose of GCES Phase II is to provide scientific information as input to the EIS. Most of the research conducted or underway has facilitated the ability to describe the existing environment and the impacts of EIS alternatives on that environment.

On July 27, 1989, Secretary of the Interior Manuel Lujan announced that an EIS was to be prepared on the operation of Glen Canyon Dam. The Notice of Intent was published in the *Federal Register* on October 27, 1989.

With the decision to prepare an EIS, it became clear that the original timing for a 4- to 5-year Phase II effort would need to be condensed if the Phase II studies were to be effective in producing information for the EIS. Concern over shortening the research period was expressed. In establishing the timeframe for the EIS, the discussion centered on the conflict between the need for thorough (lengthy) research to completely answer the outstanding questions, the need for interim flows, and the need to complete the NEPA process in a timely manner.

In June 1990, research flows were implemented at Glen Canyon Dam. Following completion of the research flows on July 31, 1991, a 90-day test period of the proposed interim flow criteria was conducted from August 1 to October 31. This interim test period allowed Reclamation to more fully evaluate data gathered from research, determine the suitability of the proposed criteria to protect downstream resources, develop exception criteria, and comply with NEPA requirements before implementation.

An EA on the interim operating criteria was issued by Reclamation in October 1991. Since the proposed action did not constitute a major Federal action having significant effects on the quality of the human environment, a FONSI was determined appropriate and was signed on October 31, 1991.

Interim operating criteria were implemented by the Secretary on November 1, 1991, as a temporary measure designed to reduce adverse impacts on downstream resources until the EIS was completed and the record of decision (ROD) is implemented.

Cooperating Agencies

Acting as lead agency, Reclamation requested the participation of cooperating agencies that either had jurisdiction by law or interest in certain aspects of Glen Canyon Dam operations or Colorado River resources below the dam. The cooperating agencies are listed below.

Department of the Interior
Bureau of Reclamation (lead agency)
Bureau of Indian Affairs
National Park Service
U.S. Fish and Wildlife Service
Department of Energy
Western Area Power Administration
Arizona Game and Fish Department
Hopi Tribe
Hualapai Tribe
Navajo Nation
San Juan Southern Paiute Tribe
Southern Paiute Consortium
Zuni Pueblo

This management-level coordinating group oversaw both the preparation of the EIS and the related GCES research activities.

A interagency, interdisciplinary team was formed to prepare the EIS. Representatives from Reclamation; NPS; FWS; Western; Arizona Game and Fish Department; U.S. Geological Survey; Hopi Tribe, Hualapai Tribe, Navajo Nation; and a private consulting firm served on the EIS team. (See the list of preparers that follows this chapter.)

CONSULTATION

The National Historic Preservation Act of 1966 (as amended in 1992) requires Federal agencies to consult with the Advisory Council on Historic Preservation concerning potential effects of Federal actions on historic properties. Therefore, Reclamation, in conjunction with NPS, the Arizona State Historic Preservation Office, Indian Tribes, and the advisory council, developed a programmatic agreement on cultural properties that include identifying, monitoring, and protecting cultural sites potentially affected by Glen Canyon Dam operations (see attachment 5).

In compliance with the Endangered Species Act, Reclamation entered into formal consultation with FWS. FWS submitted a biological opinion on the preferred alternative that contained a finding of no jeopardy for the bald eagle, Kanab ambersnail, and peregrine falcon and a jeopardy finding for the humpback chub and razorback sucker. As required by the Endangered Species Act, the opinion contained a "reasonable and prudent alternative" that could remove the likelihood of jeopardizing the continued existence of the humpback chub and razorback sucker in Grand Canyon.

A proposed rule to list the southwestern willow flycatcher (a small bird) as endangered with critical habitat, was published in the *Federal Register* on July 23, 1993. A portion of the proposed critical habitat is within the area affected by releases from Glen Canyon Dam. The declining status of the species has been a concern to all the cooperating agencies and,

therefore, specific research and population monitoring has been a part of GCES—even prior to the proposed rule. This species and its critical habitat were considered in the assessment of impacts on vegetation and bird species.

Reclamation is informally conferencing with FWS, in accordance with the rules and regulations governing proposed species and proposed critical habitat. If this process indicates that operations under the preferred alternative would jeopardize the southwestern willow flycatcher or adversely modify its proposed critical habitat, Reclamation will formally conference with FWS on this species and will consult as necessary if the proposed rule results in listing the species.

Consultation with FWS under the Fish and Wild-life Coordination Act (FWCA) has been ongoing throughout the EIS process. The FWCA ensures that fish and wildlife receive equal consideration during planning and construction of Federal water projects. FWS prepares a FWCA report which contains nonbinding recommendations for actions that would be beneficial to fish and wildlife. FWS recommendations from the FWCA report and Reclamation's responses are included in attachment 4.

Since none of the alternatives include development in the flood plain as described in Executive Order 11988, Floodplain Management, this action complies with that order. Also, none of the alternatives include development that would affect wetlands. Therefore, the action contemplated here is in compliance with Executive Order 11990, Protection of Wetlands. The marshes along the Colorado River in Glen and Grand Canyons are dynamic; some are destroyed and others created, depending on the actions of water and sediment.

PUBLIC INVOLVEMENT

One of the most important objectives of public involvement is to obtain information from a well-informed public to assist the decisionmaker (Secretary of the Interior) throughout the entire process, culminating in a ROD and eventual

implementation of the selected alternative. The three primary goals of the public involvement for this EIS were:

- 1. *Credibility*: creating an open and visible decisionmaking process for groups with highly divergent viewpoints
- 2. *Identifying public concerns and values*: providing a mechanism by which the involved agencies can understand the problems, issues, and possible solutions from the perspectives of the various publics
- 3. *Developing a consensus*: providing a process for reaching consensus about specific actions

In order to identify issues, address public concerns, obtain public input, and keep the public informed, Reclamation initiated an ongoing public involvement program when the decision to prepare an EIS was announced in July 1989. This program included meetings with local government officials, public scoping meetings, slide presentations, user group meetings and conferences, newsletters, news releases, participation of interested parties at cooperating agency meetings, and one-on-one contacts.

During preparation of this EIS, the cooperating agencies met at least every 3 months to review progress and to reach agreement on major issues. Interested parties were invited to attend these meetings as observers and, until May 1992, separate evening sessions were held for interested parties. From then on, time was allotted for questions from the audience during the cooperating agency meetings and evening sessions were discontinued.

Scoping

During EIS preparation, the process of soliciting input from groups and individuals is called scoping. The purpose of scoping is to identify issues, criteria, and alternatives for analysis. The following section describes the major actions that occurred during the scoping process. In addition to these major actions, Reclamation initiated many meetings with individuals, environmental groups,

hydropower agencies, Indian Tribes, universities and colleges, and officials of local, State and Federal governments.

The formal public scoping period for the EIS began with a *Federal Register* notice on February 23, 1990, to receive public input on and determine the appropriate scope of the EIS, consistent with NEPA and its implementing regulations.

Eight public meetings were held between March 12 and April 3, 1990, in Salt Lake City, Denver, Phoenix, Flagstaff (two), Los Angeles, San Francisco, and Washington, DC, to determine the significant issues to be analyzed in depth in the EIS. These meetings were attended by about 1,400 people. Comments were presented by about 250 people, a few of whom spoke at more than one meeting.

The comment period was extended to May 4, 1990, and more than 17,000 written and oral scoping comments were received. Each original comment letter was read at least twice to better understand the issues, concerns, and suggestions expressed. These letters are on file in Reclamation's Upper Colorado Regional Office in Salt Lake City, Utah.

A scoping report was prepared by Bear West Consulting Team (Bureau of Reclamation, 1990b), a private business that assisted in public involvement activities. The report summarizes the comments received during the scoping process. The methods used by Bear West to code and summarize public comments were approved by the cooperating agencies.

Comments were summarized as issues or resources of concern in the following categories: beaches, endangered species, ecosystem, fish, electric power costs, electric power production, sediment, water conservation, rafting and boating, air quality, the Grand Canyon wilderness, and a category designated as "other" for remaining concerns. The comments regarding interests and values were categorized as: expressions about the Grand Canyon, economics, nonquantifiable values, nature versus human use, and the

complexity of Glen Canyon Dam issues (Bureau of Reclamation, 1990b). The following is a brief summary of these public comments.

Resources

Beaches. The main concerns noted were erosion, degradation, and inadequacy of beaches. Causes of beaches deteriorating were identified as: fluctuating dam releases, the floods of 1983, the lack of sediment in the waters, and overuse by rafters and hikers. The replacement of native vegetation by non-native vegetation also was listed as a problem.

Endangered Species. The most common concern expressed was for the humpback chub, followed by the razorback sucker and willow flycatcher. Broad support for the protection of endangered species, especially fish and birds, was expressed. Comments also included requests that some efforts be made to restore the fish species now missing from the Colorado River in Grand Canyon.

Ecosystem. Some specific elements of the ecosystem identified as special concerns included wildlife, aquatic ecosystem, riparian community, waterfowl, wetlands, and the food chain. Comments were made that it was time to return the ecosystem to a more natural condition. Many felt that the integrity of the ecosystem needed to be given priority over power generation considerations and that fluctuating flows were the main source of ecosystem damage.

Fish. The trout fishery below the dam was an area of concern. The main comment was that the fish are being killed by fluctuating flows and that the dam could be managed in a manner more supportive of the fishery. The major concern was fish stranding—particularly of spawning fish—that occurs during low flows. It was also mentioned that native fish have been or are being lost. According to the comments, much of the problem centers on water temperature. Other problems identified were danger to anglers caused by fluctuating water levels and ramp rates, lack of angler access to certain areas during low flows,

problems controlling striped bass, and the possibility that current regulations allow overfishing.

Power Costs. The most frequent comments were that the present cost of power generated at the dam represents a subsidy and that market rates should be charged and adjusted seasonally. Others flatly denied that any subsidy was involved. It was suggested that an independent audit is needed to determine the true operating costs of the Colorado River Storage Project and to determine whether or not a subsidy is actually occurring. Maintaining access to low-cost power was particularly important to people in rural areas. It was also suggested that conservation measures are vital to keeping power costs down.

Power Production. The most frequent comment regarding power production was that power resources do not or should not have priority over other resources. Others claimed that peaking power operations were causing severe damage to downstream resources. Comments encouraged study of alternatives that would reduce the need for peaking power production at the dam. According to some, contracts for firm power sales should be based only on the 8.23 million acre-feet annual water release requirement, and increasing the power generation capacity at Hoover Dam should be studied.

Those who argued against changes in dam operation stated that hydropower is critical to the economic development and general well-being of the rural Southwest. Power customers believe that hydropower is compatible with the environment and that alternative power sources pose environmental problems of their own. Those who use power produced by the dam fear they will bear the brunt of operational changes at the dam and feel that their needs should be given equal consideration with environmental protection.

Sediment. Many comments suggested that, because most sediment is being trapped behind the dam, the downstream sediment needs to be augmented and conserved. Many comments claimed that a great deal of existing sediment is carried away in high flows and deposited at the

upper end of Lake Mead, making access upriver impossible for power boats. Caution was raised that any sediment used for augmentation must be studied for toxic elements that would damage the system instead of helping it.

Water Conservation. Those commenting recognized the need for water conservation. The major concern was that changes in dam operation could affect water allocation deliveries and place undue burdens on irrigation users.

Rafting and Boating. Some argued that flows since the construction of the dam are more reliable and enhance boating, but others said that dam operations are making the boating experience less pleasant and even hazardous. Also, increased beach erosion has resulted in fewer beaches for camping. Others felt that the beaches are overused, the number of permits should be reduced, and the size of groups should be carefully regulated.

Air Quality. Most comments referred to the decrease in visibility caused by air pollution affecting Grand Canyon. Concern was expressed that pollution might get worse if alternatives to hydropower are used.

Grand Canyon Wilderness. Most of the comments made about Grand Canyon wilderness centered on the desire to promote the long-term well-being of the canyon and its resources. While some pointed out that recreational use is causing damage, others considered this damage minor compared to the damage caused by power production.

Other Concerns. The variety of comments in this category included statements that dam operations adversely affect recreational and other resources and that the reservoir is filling up with silt. Some felt that removing the dam ought to be a choice. Concern also was expressed about the value of archeological and anthropological ruins and cultural resources.

Social Values

Expressions about Grand Canyon. The national and international significance of Grand Canyon was the focus of most comments in this category. A deep love and concern was expressed for its beauty and the intangible benefits to those who view it, hike in it, and raft through it. The preservation of the fragile canyon for future generations was felt to be worth any cost associated with it—especially the cost associated with changing power production methods.

Economics. Several economic issues were identified. First, it was noted that little attention has been given to the economic contributions of power customers to the environmental studies. Second, it was suggested that the economic tradeoffs involved in these issues be thoroughly studied. Third, it was noted that environmental damage has been the price paid in the past for cheap power and that we now face a choice between higher power costs or continued environmental damage. The economic value of tourism in the canyon and the profitability of the rafting industry both were acknowledged. It was suggested that nonprofit (public power) agencies should be given more priority in power allocations than profit-making ones, since the dam was built using public funds. Some comments stated that the cost of power should be the last consideration in deciding on dam management and that protecting the canyon is worth any price. Others said that the result of the benefit/cost process should be the greatest benefit at the lowest societal cost.

Nonquantifiable Values. The majority of comments expressed that environmental awareness and a desire to preserve natural resources are increasing in this country. While some noted that the dam has had some positive environmental effects, others expressed the feeling that building the dam and flooding Glen Canyon was a major mistake. Some stated that natural resources have a finite capacity for intrusion, but others emphasized that while wise use of resources is necessary, we should use them.

Nature Versus Human Use. Most of the comments in this area centered on people tampering with the environment using imperfect knowledge and creating problems which then must be solved. Those commenting felt that interference with the delicate ecosystem of Grand Canyon is no exception. Others pointed out that man's interference with Grand Canyon is insignificant when compared to the natural, historic changes that have taken place there.

Complexity of Issues. The fact that the issues to be studied as part of the EIS process, including the canyon, are very complex and interrelated was reflected in all comments on this issue. The EIS was described as a complex balancing act.

Summary of Public Meetings on Preliminary Alternatives

As a result of scoping, it was apparent that the issues and potential alternatives were diverse, and compromise and consensus would be difficult to reach.

Following the formal public scoping period and review of the comments, representatives from the cooperating agencies and public interest groups met in July 1990 to determine criteria for developing reasonable alternatives for the EIS. These criteria included:

- Be consistent with the scope of the EIS
- Be economically and technically feasible
- · Reflect legal considerations
- Have general institutional acceptability
- · Be timely to implement
- Be able to be monitored and adjusted
- Meet various agency mandates
- Be supported by data
- Be multipurpose (integrated) and not eliminate any major resources
- Include mitigation

The EIS team reviewed the scoping comments with the concept of reasonableness in mind and, using the above criteria, formulated 10 preliminary alternatives. All reasonable concerns expressed during the scoping process were treated

fairly and objectively in order to produce an array of alternatives for the EIS. The 10 preliminary alternatives provided a wide range of possible flow patterns and supporting actions in response to public issues and concerns.

The EIS team presented the 10 preliminary alternatives to the public for review and comment before preparing the EIS. These preliminary alternatives were summarized in a newsletter sent in mid-March 1991 to about 20,000 addresses. Three public meetings were held to explain the preliminary alternatives, to respond to questions, and to solicit comments. These meetings were held in Salt Lake City, Utah; Flagstaff, Arizona; and Phoenix, Arizona. The public was notified of these meetings through the local news media and an announcement in the *Federal Register*. The public comment period on the alternatives ran from April 1 to May 1, 1991.

The public was informed that the alternatives judged to be "reasonable" would be subjected to detailed analysis in the EIS. Those determined to be not reasonable would be briefly identified in the EIS, but eliminated from further study. The public was asked to use the above criteria and determine the "reasonableness" of the alternatives; general views and comments also were accepted.

The EIS team received 456 letters—112 from organizations and 344 from private individuals. These letters were reviewed and categorized by the Bear West Consulting Team and summarized in the Glen Canyon Dam Environmental Impact Statement Preliminary Alternatives Report, April—May 1991 (Bureau of Reclamation, 1991b).

The predominant public comment was the need for "operation only" alternatives or separate analysis of the operation and nonoperational measures rather than the complete package approach. A list of other comments most frequently voiced can be found in chapter II under "Process Used to Formulate Alternatives."

Alternatives Selected for Detailed Analysis

The EIS team reviewed the public comments on the preliminary alternatives. That review and early technical analysis allowed the EIS team to reduce the alternatives studied in detail from 10 to 7 for analysis.

These seven alternatives were presented to the cooperating agencies and to interested parties at a meeting in Phoenix on September 16–18, 1991. A synopsis of these alternatives was distributed to more than 19,000 people in a January 1992 newsletter. The EIS team subsequently formulated two additional alternatives in order to present a full range of reasonable operations.

Public Review of Draft EIS

The draft EIS was filed with the Environmental Protection Agency on January 4, a press conference announcing its release was held on January 6, and a *Federal Register* notice was published on January 7, 1994. National television networks, as well as many newspapers in the seven Basin States and local television and radio stations in Phoenix, Flagstaff, and Salt Lake City, announced the release of the draft EIS.

The entire three-volume draft EIS was mailed to those on the distribution list in this chapter. In addition, the 65-page summary volume was distributed to over 17,000 interested parties on the *Colorado River Studies Office Newsletter* mailing list. Reclamation received over 1,000 requests for either the entire draft EIS or the summary volume after the initial distribution.

The public review process was designed to build upon the substantial public involvement established throughout the EIS process. Three public information sessions and two briefings on the EIS were conducted. Seven public hearings were held to accept comments.

Public Information Sessions

In February 1994, prior to public hearings, Reclamation hosted three public information sessions in Salt Lake City, Phoenix, and Flagstaff. The sessions provided the public with an opportunity to learn more about the EIS. Members of the interagency EIS team presented displays and were available to answer questions and to discuss how the alternatives would affect the resources of Grand Canyon. The purpose of these sessions was to provide information and answer questions, not to receive official comments on the draft EIS. In addition to the information sessions, two briefings were conducted in the Washington, DC area—one on Capitol Hill and one in Arlington, Virginia.

Advance notice of the sessions was announced in the newsletter, and press releases were sent to newspapers and radio and TV stations in the involved areas. Personal letters of invitation were sent to members of Congress from the seven Basin States, specific congressional committees, and Governors of Arizona and Utah.

Public Hearings

Public hearings to accept oral comments on the draft EIS were held during March 1994 in Los Angeles and San Francisco, California; Phoenix and Flagstaff, Arizona; Salt Lake City, Utah; Washington, DC; and Arlington, Virginia. The Department of the Interior provided a solicitor to preside over the hearings, and two officials from Reclamation familiar with the draft EIS also participated. All oral comments were recorded verbatim by a court recorder and became part of the official record.

Public Comments

The official comment period on the draft EIS began on January 7, 1994, and was concluded on April 11, 1994. In addition, comments received for more than a month after the close of the official comment period were accepted to ensure that all comments received within reasonable timeframe would be reviewed for the final EIS.

Over 33,000 written comments as well as the oral comments received during the public hearings were reviewed and analyzed by Reclamation officials and the Bear West Consulting Team.

More than 2,300 separate concerns, issues, or opinions were extracted from the comment analysis. A summary of the comments and responses is presented in the "Comments and Responses" volume of this document.

The "Public Comments Analysis Report" prepared by the Bear West Consulting Team (Bureau of Reclamation, 1994b), responses prepared by the EIS team, all public comments, and the public hearing transcripts are filed with the Bureau of Reclamation, Upper Colorado Regional Office, Salt Lake City, Utah, as part of the official record.

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Gallup, New Mexico; Southern Paiute Field Station, St. George, Utah; Truxton Canon Agency, Valentine, Arizona

Bureau of Land Management, Salt Lake City, Utah; Lake Havasu City and Phoenix, Arizona; Denver and Lakewood, Colorado; Sacramento, California

Bureau of Mines (Research Center), Salt Lake City, Utah

Fish and Wildlife Service, Albuquerque, New Mexico; Phoenix, Arizona; Salt Lake City, Utah; Denver, Colorado

Geological Survey, Menlo Park, California; Salt Lake City, Utah; Tucson and Flagstaff, Arizona; Arvada and Boulder, Colorado; Cheyenne, Wyoming; Reston, Virginia

National Biological Service, Fort Collins, Colorado

National Park Service, San Francisco, California;
Denver and Fort Collins, Colorado; Flagstaff,
Arizona; Canyonlands National Park, Moab,
Utah; Glen Canyon National Recreation Area,
Page, Arizona; Grand Canyon National Park,
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Indian Tribes

Havasupai Tribe, Supai, Arizona
Hopi Tribe, Kykotsmovi Village, Arizona
Hualapai Tribe, Peach Springs, Arizona
Kaibab Paiute Tribe, Pipe Spring, Arizona
Navajo Nation, Window Rock, Arizona
Paiute Indian Tribe of Utah, Cedar City, Utah
San Juan Southern Paiute Tribe, Tuba City,
Arizona
Shivwits Paiute Tribe, Ivins, Utah
Southern Paiute Consortium, Fredonia, Arizona
Zuni Pueblo, Zuni, New Mexico

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New Mexico

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Cedar City Public Library, Cedar City
Kanab City Library, Kanab
Moab Public Library, Moab
Salt Lake City Public Library, Salt Lake City
Salt Lake County Library System, Salt Lake City
Southern Utah State University Library,
Cedar City

Uintah County Library, Vernal University of Utah, Marriott Library, Salt Lake City Utah State Library, Salt Lake City Utah State University, Merrill Library, Logan Washington County Library, St. George Weber State University, Stewart Library, Ogden

Wyoming

Laramie County Library System, Cheyenne Rock Springs Public Library, Rock Springs University of Wyoming, Coe Library, Laramie Wyoming State Library, Cheyenne

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Montgomery, Alabama
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University of Florida Libraries, Gainesville,
Florida

University of Georgia Libraries, Athens, Georgia University of Hawaii, Hamilton Library, Honolulu, Hawaii University of Idaho Library, Moscow, Idaho Illinois State Library, Springfield, Illinois Indiana State Library, Indianapolis, Indiana

University of Iowa Libraries, Iowa City, Iowa
University of Kansas, Lawrence, Kansas
University of Kentucky Libraries, Lexington,
Kentucky
Louisiana State University, Middleton Library,
Baton Rouge, Louisiana
Louisiana Technical University, Prescott
Memorial Library, Ruston, Louisiana

University of Maine, Raymond H. Fogler Library, Orono, Maine University of Maryland, Hombake Library, College Park, Maryland Boston Public Library, Boston, Massachusetts Williams College Library, Williamstown, Massachusetts Detroit Public Library, Detroit, Michigan Library of Michigan, Lansing, Michigan

University of Minnesota, Wilson Library,
Minneapolis, Minnesota
University of Mississippi, J.D. Williams Library,
University, Mississippi
University of Missouri at Columbia, Ellis
Library, Columbia, Missouri
University of Montana, Maurene and Mike
Mansfield Library, Missoula, Montana
University of Nebraska—Lincoln, D.L. Love
Memorial Library, Lincoln, Nebraska

Newark Public Library, Newark, New Jersey New York State Library, Albany, New York New York Public Library, New York, New York Research Libraries, New York, New York University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

North Dakota State University Library, Fargo,
North Dakota
State Library of Ohio, Columbus, Ohio
Oklahoma Department of Libraries, Oklahoma
City, Oklahoma
Oklahoma State University, Edmon Low Library,
Stillwater, Oklahoma
Portland State University, Millar Library,
Portland, Oregon

State Library of Pennsylvania, Harrisburg,
Pennsylvania
Clemson University, Cooper Library, Clemson,
South Carolina
Memphis State University Libraries, Memphis,
Tennessee
Texas State Library, Austin, Texas
Texas Technical University Library, Lubbock,
Texas

University of Virginia, Alderman Library, Charlottesville, Virginia

Washington State Library, Olympia, Washington

West Virginia University Library, Morgantown, West Virginia

State Historical Society of Wisconsin Library, Madison, Wisconsin

Milwaukee Public Library, Milwaukee, Wisconsin

Scientific Oversight and Review

National Academy of Sciences, Washington, DC National Research Council, Washington, DC

Interested Organizations

Academy of Natural Sciences, Philadelphia, Pennsylvania

Adobe Whitewater Club, Santa Fe, New Mexico Agri-Business Council of Arizona, Inc., Phoenix, Arizona

Ak-Chin Indian Community, Maricopa, Arizona American Bass Association, Inc., Wetumpka, Alabama; Pueblo, Colorado

American Conservation Association, Inc., New York, New York

American Farm Bureau Federation, Washington, DC; Park Ridge, Illinois

American Fisheries Society, Bethesda, Maryland; Olympia, Washington; McCall, Idaho; Albuquerque, New Mexico

American Hiking Society, Washington, DC American League of Anglers and Boaters, Washington, DC

American Public Power Association, Arlington, Virginia

American Recreation Coalition, Washington, DC American Resources Group, Vienna, Virginia American Rivers, Washington, DC American Rivers Arizona, Phoenix, Arizona

American Trails, Washington, DC American Water Resources Association, Bethesda, Maryland

American Whitewater Affiliates, Washington, DC American Wildlands, Englewood, Colorado Americans for the Environment, Washington, DC Animas - LaPlata Water Conservancy District, Durango, Colorado Argonne National Laboratory, Lakewood, Colorado; Argonne, Illinois Arizona Conservation Council, Phoenix, Arizona

Arizona Energy Office, Phoenix, Arizona Arizona Ethnobotanical Research Association, Flagstaff, Arizona

Arizona Hydrological Society, Flagstaff, Arizona Arizona Municipal Power Users Association, Phoenix, Arizona Arizona Municipal Water Users, Phoenix, Arizona Arizona Nature Conservancy, Tucson, Arizona Arizona Parks and Recreation Association, Phoenix, Arizona

Arizona Parks and Recreation Council,
Phoenix, Arizona
Arizona Power Administration, Phoenix, Arizona
Arizona Power Authority, Phoenix, Arizona
Arizona Power Pooling Association, Phoenix and
Mesa, Arizona
Arizona Public Service (Federal Affairs),

Arizona Raft Adventures, Flagstaff, Arizona Arizona River Runners, Phoenix, Arizona Arizona State University, Center for Environmental Studies, Tempe, Arizona Arizona Whitewater Association, Tempe, Arizona Arizona Wilderness Coalition, Phoenix, Arizona

Arizona Wildlife Federation, Mesa, Arizona Arizonans' Wild and Scenic Rivers, Cortaro, Arizona

Washington, DC

Aspen Environmental Group, Agoura Hills, California

Association of Bay Area Governments, Oakland, California

Audubon Society (see National Audubon Society)
Coordinating Counsel of Utah, Clearfield, Utah
Maricopa, Phoenix, Arizona
Napa-Sonoma, Napa, California
Northern Arizona, Flagstaff and Sedona, Arizona
Prescott, Prescott, Arizona

Yosemite Area Chapter, Mariposa, California

Bard Water District, Winterhaven, California Beaver City, Utah

Boulder City Electrical Distribution Department, Boulder City, Nevada

Bountiful City Light and Power Department, Bountiful, Utah

Bridger Valley Electric Association, Mountain View, Wyoming

California Chapter Bass Federation, Stockton, California

California Energy Commission, Sacramento, California

California Farm Bureau Federation, Sacramento, California

California Natural Resources Federation, Berkeley, California

California Trout, Inc., San Francisco, California

California Wilderness Coalition, Davis, California California Wildlife Federation, Sacramento, California

Canoe Cruisers Association, Arlington, Virginia Canyon and Rivers Environment, Flagstaff, Arizona

Canyon Explorations, Flagstaff, Arizona

Canyoneers, Inc., Flagstaff, Arizona Center for Environmental Information, Inc., Rochester, New York

Center for Urban Affairs and Policy Research, Evanston, Illinois

Central Arizona Paddlers Club, Phoenix, Arizona Central Arizona Project Association, Phoenix, Arizona

Central Arizona Water Conservation District, Phoenix, Arizona

Central Utah Water Conservancy District, Orem, Utah

Clean Water Action, Washington, DC; Houston, Texas

Coachella Valley Water District, Coachella, California

Coconino County Parks and Recreation Association, Flagstaff, Arizona Coconino Sportsmen, Flagstaff, Arizona Colorado River and Trail Expeditions, Inc., Salt Lake City, Utah

Colorado River Basin Salinity Control Forum, Bountiful, Utah

Colorado River Energy Distributors Association, Salt Lake City, Utah; Phoenix, Arizona

Colorado River Front Property Owners, Mohave Valley, Arizona

Colorado River Resources Coalition, Salt Lake City, Utah; Desert Hot Springs, California

Colorado River Water Conservation District, Glenwood Springs, Colorado

Colorado River Wildlife Council, Salt Lake City, Utah

Colorado Springs, City of; Utilities Department, Colorado Springs, Colorado

Colorado Water Congress, Denver, Colorado

Colorado Whitewater Association, Boulder, Colorado

Columbus Electric Coop, Inc., Deming, New Mexico

Commission on the Arizona Environment, Phoenix, Arizona

Conservation Foundation, the, Washington, DC Continental Divide Electric Cooperative, Grants, New Mexico

Cooperative Wilderness Handicapped Outdoor Group, Pocatello, Idaho

Cortaro Marana Irrigation District, Marana, Arizona

Council for Planning and Conservation, Beverly Hills, California

CSWTA, Inc., Tuba City, Arizona

Defenders of Wildlife, Washington, DC; Tucson, Arizona

Desert Flycasters, Chandler, Arizona Diamond River Adventures, Page, Arizona Dixie Escalante Rural Electric Association, St. George, Utah; Beryl, Utah Dolores Water Conservancy District, Cortez,

Colorado

Ducks Unlimited, Inc., Memphis, Tennessee

Ecological Society of America, the, Bethesda, Maryland Ecology Center of Southern California, Los Angeles, California EcoPlan Associates, Inc., Mesa, Arizona Electrical District No. 3, Stanfield, Arizona Emery Water Conservancy District, Castle Dale, Utah

Enterprise, City of; Utah
Environmental Action Foundation, Inc.,
Washington, DC
Environmental and Energy Study Institute,
Washington, DC
Environmental Defense Fund, Inc., New York,
New York; Oakland, California; Boulder,
Colorado; Austin, Texas
Environmental Law Institute, Washington, DC

Environmental Policy Institute, Washington, DC Farmington, City of; New Mexico Federation of Fly Fishers, West Yellowstone, Montana Federation of Western Outdoor Clubs, Seattle, Washington Five County Association of Governments, St. George, Utah

Flagstaff, City of; Arizona Flowell Electrical Association, Inc., Fillmore, Utah Flowing Wells Irrigation District, Tucson, Arizona Foundation for North American Wild Sheep, Cody, Wyoming Friends of Arizona Rivers, Phoenix, Arizona

Friends of the Colorado River, Flagstaff, Arizona Friends of the River, Inc. (and Foundation), San Francisco and Sacramento, California Fund for Animals, Inc., The, New York, New York Garkane Power Association, Richfield, Utah Global Walk for a Livable World, Madison, Wisconsin

Grand Canyon Expeditions, Kanab, Utah Grand Canyon Natural History Association, Grand Canyon, Arizona Grand Canyon River Guides Association, Flagstaff, Arizona Grand Canyon Trust, Washington, DC; Flagstaff and Phoenix, Arizona Hatch River Expedition, Salt Lake City, Utah Helix Water District, La Mesa, California High Country River Rafters, Golden, Colorado Highline Electrical Association, Holyoke, Colorado Hohokam Irrigation and Drainage District, Coolidge, Arizona Holiday River Expeditions, Inc., Salt Lake City, Utah

Hurricane Power Association, Richfield, Utah Hyrum, City of; Utah Imperial Irrigation District, Imperial, California Intermountain Consumer Power Association, Sandy, Utah Intertribal Council of Arizona, Phoenix, Arizona

Izaak Walton League of America, Inc., The,
Arlington, Virginia; California Division,
San Pedro, California; Prescott, Arizona
Kanab, City of; Utah
Kaysville City, Utah
Land, Wildlife & Heritage Program Conservation
Foundation, Washington, DC
Las Vegas Valley Water District, Las Vegas,
Nevada

Lawrence Livermore National Laboratory,
Livermore, California
League of Conservation Voters, Washington, DC
League of Women Voters of the U.S.,
Washington, DC; Sacramento, California
Logan City Light and Power, Logan, Utah
Los Alamos, County of; Department of Public
Utilities, Los Alamos, New Mexico

Los Angeles Department of Water and Power, Los Angeles, California Maricopa Water District, Waddell, Arizona Metropolitan Water District of Southern California, Los Angeles, California Moki Mac River Expedition, Salt Lake City, Utah Monroe City Corporation, Monroe, Utah

Morgan City Corporation, Morgan, Utah Mothers for Clean Waters, Inc., Phoenix, Arizona Mountainview Electric Association, Inc., Limon, Colorado Murray City Corporation, Murray, Utah Murray City Power, Murray, Utah National Association of Conservation Districts, Washington, DC; Western Region, Lakewood, Colorado

National Audubon Society, New York, New York; Washington, DC; Boulder, Colorado; Sacramento, California

National Boating Federation, Washington, DC National Ecology Research Center, Fort Collins, Colorado

National Indian Policy Center, Washington, DC

National Organization for River Sports, Boulder and Colorado Springs, Colorado National Park Foundation, Washington, DC National Parks and Conservation Association, Washington, DC; Cottonwood and Tucson, Arizona; Salt Lake City, Utah

National Rural Electric Cooperative Association, Washington, DC

National Water Resources Association, Arlington, Virginia

National Wetlands Technical Council, Washington, DC

National Wildlife Federation, Washington, DC; Sacramento, California; Ft. Carson, Colorado Natural Resources Council of America, Washington, DC

Natural Resources Defense Council, Inc., New York, New York; San Francisco, California Nature Conservancy, The, Arlington, Virginia; San Francisco, California; Boulder, Colorado

Nature's Own, Nederland, Colorado Navajo Tribal Utility Authority, Fort Defiance, Arizona

Navopache Electric Coop, Inc., Lakeside, Arizona Nevada Power Company, Las Vegas, Nevada Nevada Wildlife Federation, Reno, Nevada

North American Lake Management Society, Alachua, Florida Northern Arizona Council of Governments, Flagstaff, Arizona Northern Colorado Water Conservancy District, Loveland, Colorado O.A.R.S., Inc., Angels Camp, California Page Electric Utility, Page, Arizona Palo Verde Irrigation District, Blythe, California Pioneer Irrigation District, Caldwell, Idaho Plains Electric Generation & Transmission Coop, Inc., Albuquerque, New Mexico Platte River Power Authority, Fort Collins, Colorado Quartzsite, Town of; Arizona

Queen Creek Irrigation District, Queen Creek, Arizona Rancho California Water District, Temecula, California Resources for the Future, Washington, DC River Trips, Flagstaff, Arizona Roosevelt Irrigation District, Buckeye, Arizona

Salt River Project, Phoenix, Arizona
Santa Clara, City of; Utah
San Tan Irrigation District, Chandler Heights,
Arizona
Shipley Associates, Bountiful, Utah
Sierra Club, San Francisco, California;
Washington, DC; Los Angeles, California;
Boulder, Colorado; Salt Lake City, Utah; Phoenix,
Arizona; Flagstaff, Arizona

Sierra Legal Defense Fund, Denver, Colorado Silver State Power Association, Pahrump, Nevada Sobek's White Water Rafting, Angels Camp, California Southeastern Colorado Water Conservancy District, Pueblo, Colorado Southeastern Utah Association of Local Governments, Price, Utah

Southwest Parks & Monuments Association, Tucson, Arizona Southwestern Electric Coop, Inc., Clayton, New Mexico Southwestern Water Conservation District, Durango, Colorado Springville City Corporation, Springville, Utah St. George Water and Power Board, St. George, Utah Strawberry Electric Service District, Payson, Utah
Taxpayers for the Animas River, Durango,
Colorado
Thatcher, Town of; Arizona
Timber Resources Information Program,
Edgewater, Colorado
Tour West, Inc., Orem, Utah

Tri-State Generation and Transmission
Association, Inc., Denver, Colorado
Trout Unlimited, Vienna, Virginia;
Rocky Mountain Region, Wheat Ridge, Colorado;
West Coast Region, Fairfax, California; Arizona
Council, Flagstaff, Glendale, and Phoenix, Arizona;
California Council, Huntington Beach, California;
Utah Council, West Valley, Utah
Truth or Consequences, City of; New Mexico
Tucson Active Management Area, Tucson, Arizona
Tucson, City of; Tucson Water Department,

Tucson Rod & Gun Club, Tucson, Arizona
Upper Colorado River Commission, Denver,
Colorado; Salt Lake City, Utah; Santa Fe,
New Mexico
Upper Gunnison River Water Conservancy
District, Gunnison, Colorado
U.S. Canoe and Kayak Team, Bethesda,
Maryland
Utah Energy Office, Salt Lake City, Utah

Tucson, Arizona

Utah Farm Bureau Federation, Salt Lake City, Utah Utah Municipal Power Agency, Spanish Fork, Utah Utah Power and Light, Salt Lake City, Utah Utah Water Users Association, Bountiful, Utah Utah Wilderness Association, Salt Lake City, Utah Utah Wildlife Federation, Salt Lake City, Utah Utah Wildlife Leadership Coalition, West Valley City, Utah Washington County Water Conservation District, St. George, Utah Western Interstate Energy Board, Denver, Colorado Western River Guides Association, Flagstaff,

Arizona

Wilderness River Adventures, Page, Arizona
Wilderness Society, The, Washington, DC;
San Francisco, California; Santa Fe, New Mexico;
Phoenix, Arizona; Denver, Colorado
Wildlife Society, The, Bethesda, Maryland;
Western Section, Lakeview and Fresno, California;
Phoenix, Arizona; Reno, Nevada; Cedar City, Utah
Wyoming Municipal Power Agency, Lusk,
Wyoming
Wyoming Public Service Commission, Cheyenne,
Wyoming

Yuma Mesa Irrigation and Drainage District, Yuma, Arizona Y-W Electric Association, Inc., Akron, Colorado